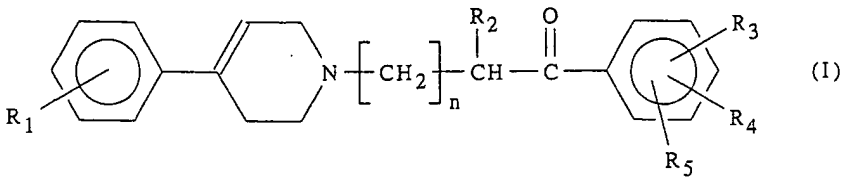
CLAIMS

1. Use of the compounds of formula (I)



(I)

in which

R_1 is halogen, a CF_3, (C_1-C_4) alkyl or (C_1-C_4) alkoxy group;

n is 0 or 1

R_2 is hydrogen or a (C_1-C_4) alkyl group;

R_3 is hydrogen, (C_1-C_6) alkyl, (C_1-C_6) alkoxy; halogen, a CF_3 group, hydroxy, a group selected from (C_3-C_7) cycloalkyl, phenyl, phenoxy, phenylmethyl or phenylethyl, said group being optionally mono- or polysubstituted on the phenyl group by halogen, CF_3, (C_1-C_4) alkyl or (C_1-C_4) alkoxy;

R_4 and R_5 is each independently hydrogen, (C_1-C_6) alkyl, (C_1-C_6) alkoxy, halogen, a CF_3 group or hydroxy;

as well as their salts and solvates and their quaternary ammonium salts, for the preparation of medicines designed for the treatment and/or the prophylaxis of the diseases which involve neuronal degeneration.

2. Use according to Claim 1 of the compounds of formula (I) where n is zero.

3. Use according to Claim 1 or 2 of the compounds of formula (I) where R_2 is hydrogen.

4. Use according to one of the Claims 1 to 3 of the compounds of formula (I) where one of R_3, R_4 and R_5 is hydrogen.

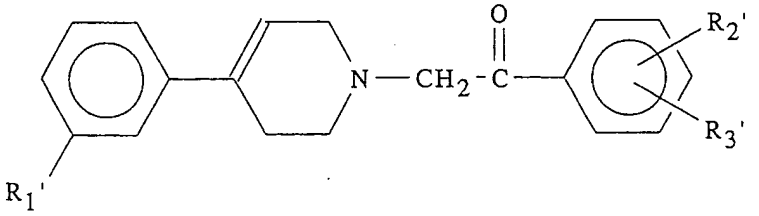
5. Use according to one of the Claims 1 to 4 of the compounds of formula (I) where the group R_1 is a CF_3 group at position 3 of the phenyl group.

6. Use according to one of the Claims 1 to 5 for the preparation of medicines indicated in the treatment and/or prophylaxis of memory disorders, vascular dementia, post-encephalitic disorders, post-apoplectic disorders, post-traumatic syndromes due to a cranial traumatism, Alzheimer's disease, senile dementia, subcortical dementia, such as Huntington chorea and Parkinson's disease, dementia caused by AIDS, neuropathies resulting from morbidity or damage to sympathetic or sensory nerves, cerebral diseases such as cerebral oedema and spinocerebellar

degenerations, degeneration of motoneurons like, for example, amyotrophic lateral sclerosis.

7. Use according to Claim 6 where the compound of formula (I) is coadministered or combined with other active ingredients acting on the CNS, selected from selective M_1 cholinomimetics, NMDA antagonists and nootropic agents.

8. Compound of formula (I')



(I')

in which

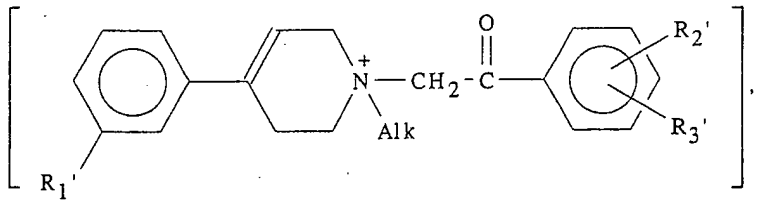
R'_1 is halogen, a CF_3, (C_1-C_4) alkyl or (C_1-C_4) alkoxy group;

R'_2 is (C_1-C_6) alkyl, (C_1-C_6) alkoxy; halogen, a CF_3 group, hydroxy, a group selected from (C_3-C_7) cycloalkyl, phenyl, phenoxy, phenylmethyl or phenylethyl, said group being optionally mono- or polysubstituted on the phenyl group by halogen, CF_3, (C_1-C_4) alkyl or (C_1-C_4) alkoxy;

R'_3 is hydrogen, (C_1-C_6) alkyl, (C_1-C_6) alkoxy, halogen, a CF_3 group or hydroxy;

as well as their salts and solvates and their quaternary ammonium salts.

9. Compound according to Claim 8 of formula (I")



(I")

where X^- is a pharmaceutically acceptable anion, Alk is (C_1-C_4) alkyl and R'_1, R'_2 and R'_3 are as defined for the compounds (I') in Claim 8.

10. Compound according to Claim 8 selected from :

1-{2-(3'-chlorobiphenyl-4-yl)-2-oxoethyl}-4-(3-trifluoromethyl-phenyl)-1,2,3,6-tetrahydropyridine;

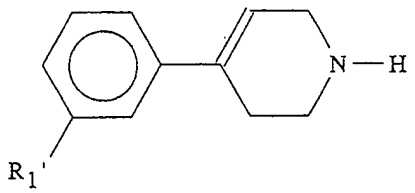
1-{2-(2'-chlorobiphenyl-4-yl)-2-oxoethyl}-4-(3-trifluoromethyl-phenyl)-1,2,3,6-tetrahydropyridine;

1-{2-(4'-chlorobiphenyl-4-yl)-2-oxoethyl}-4-(3-trifluoromethyl-phenyl)-1,2,3,6-tetrahydropyridine;

1-{2-(4-isobutylphenyl)-2-oxoethyl}-4-(3-trifluoromethyl-phenyl)-1,2,3,6-tetrahydropyridine;
1-{2-(4-benzylphenyl)-2-oxoethyl}-4-(3-trifluoromethyl-phenyl)-1,2,3,6-tetrahydropyridine;
1-{2-(4-cyclohexylphenyl)-2-oxoethyl}-4-(3-trifluoromethyl-phenyl)-1,2,3,6-tetrahydropyridine;
1-{2-(4'-fluorobiphenyl-4-yl)-2-oxoethyl}-4-(3-trifluoromethyl-phenyl)-1,2,3,6-tetrahydropyridine;
1-{2-(4-n-butylphenyl)-2-oxoethyl}-4-(3-trifluoromethyl-phenyl)-1,2,3,6-tetrahydropyridine;
1-{2-(biphenyl-4-yl)-2-oxoethyl}-4-(3-trifluoromethyl-phenyl)-1,2,3,6-tetrahydropyridine;
1-{2-(4-t-butylphenyl)-2-oxoethyl}-4-(3-trifluoromethyl-phenyl)-1,2,3,6-tetrahydropyridine;
1-{2-(3,4-diethylphenyl)-2-oxoethyl}-4-(3-trifluoromethyl-phenyl)-1,2,3,6-tetrahydropyridine;
1-{2-(2'-trifluoromethylbiphenyl-4-yl)-2-oxoethyl}-4-(3-trifluoromethyl-phenyl)-1,2,3,6-tetrahydropyridine;
1-{2-(3'-trifluoromethylbiphenyl-4-yl)-2-oxoethyl}-4-(3-trifluoromethyl-phenyl)-1,2,3,6-tetrahydropyridine;
1-{2-(4'-trifluoromethylbiphenyl-4-yl)-2-oxoethyl}-4-(3-trifluoromethyl-phenyl)-1,2,3,6-tetrahydropyridine;
as well as their salts and solvates.

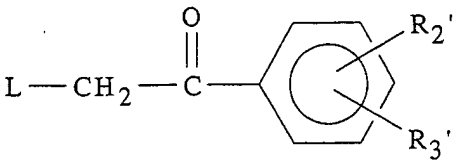
11. Process for the preparation of the compounds of formula (I') according to Claim 8, their salts or solvates and their quaternary ammonium salts, characterized in that

(a) an aryl-1,2,3,6-tetrahydropyridine of formula (II)



(II)

in which R'_1 is as defined for the compounds (I') in Claim 8, is reacted with a compound of formula (III)



(III)

in which R'_2 and R'_3 are as defined for the compounds (I') in Claim 8 and L is a leaving group; and

(b) the compound of formula (I') thus obtained is isolated and optionally converted into one of its salts or solvates or one of its quaternary ammonium salts.

12. Pharmaceutical composition containing as active ingredient a compound according to one of the Claims 8 to 10.

13. Pharmaceutical composition containing as active ingredient a compound of formula (I) such as defined in Claim 1 and a compound indicated in the symptomatic treatment of DAT, selected from the acetylcholinesterase inhibitors, the M1 muscarinic agonists, the nicotinic agonists, the NMDA receptor antagonists and the nootropic agents, and their pharmaceutically acceptable salts.